

## 13C1400BK - NatureWax® S-113 Soy Base Stock 113° MP Product Specification

### Product Description

Hydrogenated soybean glycerides. Citric acid added to preserve freshness.

### Application

Vegetable glycerides substitute for paraffin in wax applications.

### Technical Chemical / Physical Properties

| Chemical & Physical Analysis    | Minimum | Typical | Maximum | UOM    | Method         |
|---------------------------------|---------|---------|---------|--------|----------------|
| Color Red                       |         |         | 1.5     |        | AOCS Cc 13j-97 |
| Free Fatty Acids as oleic (282) |         |         | 0.1     | %      | AOCS Ca 5a-40  |
| Peroxide Value                  |         |         | 1.5     | meq/kg | AOCS Cd 8b-90  |
| Iodine Value                    | 50      |         | 60      | cg/g   | AOCS Cd 1-25   |
| Mettler Dropping Point          | 111     | 123     | 116     | °F     | AOCS Cc 18-80  |
| Solid Fat Content at 10 °C      | 86      |         |         |        | AOCS Cd 16b-93 |
| Solid Fat Content at 21.1 °C    | 69      |         |         |        | AOCS Cd 16b-93 |
| Solid Fat Content at 33.3 °C    | 28      |         |         |        | AOCS Cd 16b-93 |
| Solid Fat Content at 40 °C      |         |         | 21      |        | AOCS Cd 16b-93 |

### Possible Uses

Candles: Container Candle Wax, softener for pillar candles

Toiletries: Hair Care products, Pomade, Soaps, lotions

Other: Paper cup coatings, Stationary pencils, Color pencils, Ink ribbons, Mold lubricant, Textile finishes, Sizing, Cord lubricant, Metal lubricant, Adhesives, Thermoplastics resin additive, & leather dressing, crayons

### Allergen Statement

The causative agents of food allergies are the proteins of the oilseed from which edible oils (soybean, canola, cottonseed, sunflower, corn, palm, palm kernel, coconut, peanut) are extracted. These Oils are then highly refined through the process of refining, bleaching and deodorization. These oils described in studies as "highly refined" do not demonstrate a hazard to allergic individuals, as shown in studies using the "gold standard" for food allergy diagnosis, the double-blind placebo-controlled food challenge.

Hefle, Susan L. and Taylor, S. L., Allergenicity of Edible Oils, Food Allergy Research & Resource Program, 9/1/1998.

### Bio-Engineered Status

Our NatureWax products are manufactured from natural oils. There are no genetically modified markers present in the natural oils comprising or used to manufacture this product.

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### Product Specification

#### Regulated Additive(s)/Ingredient(s)

|                     |             |
|---------------------|-------------|
| Additives:          | Citric Acid |
| Antioxidant:        | None        |
| Anti-Foaming Agent: | None        |

### Packaging & Coding

#### Lot code Format

Bulk Lot Code is the Bill of Lading number. This number is a unique number generated by our sales order system. From this unique number we are able to trace back through our processing steps within our Quality Control System to the source oil(s).

### Shelf Life, Shipping, & Storage Information

#### Product Shelf Life

Typical bulk storage period or "shelf-life" of oils and shortenings held in bulk is three to four weeks under controlled conditions -- protected from light, moisture, at the correct temperature and under nitrogen blanket.

#### Shipping & Storage Conditions

Bulk oils should be stored and shipped under controlled conditions to protect from light and moisture, maintain correct temperature and with nitrogen blanket. Storage conditions should be maintained so to minimize the impact of the following four (4) causes of degradation:

1. Heat - The oil should ideally be held between 60 -100°F for oils that are liquid at room temperature and 15-25°F above the melting point for oils that are solid at room temperature.
2. Exposure to oxygen - Oxidative deterioration is the main cause for flavor and stability problems with fats and oils. Ways to minimize exposure to oxygen are:
  - \* Be sure oil does not free-fall into tank, i.e., fill from the bottom or have a downspout from the top to below the surface.
  - \* If a recirculation system is used, be sure there are no air leaks around flanges, pump seals, etc.
  - \* Only recirculate the oil long enough to maintain a homogeneous mixture i.e., the more it is mixed, the greater the chance of deterioration.
  - \* If the oil is to be held for extended periods of time (over three weeks) nitrogen blanketing the tank is recommended.
3. Light - Light can cause flavor deterioration of fats and oils and measures should be taken to minimize this exposure. This is only a problem in fiberglass tanks that are exposed to direct sunlight or indoor lighting - steel or insulated tanks do not usually have light exposure problems.
4. Trace metals - Trace metals such as copper and iron are extremely pro-oxidant and care should be taken to avoid any places where these substances might be introduced to the oil. Things to avoid are any fittings or valves that are constructed of copper or brass

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